

Please type a plus sign (+) inside this box ☒

PTO/SB/05 (11-00)  
Approved for use through 10/31/2002. OMB 0651-0032  
Patent and Trademark Office. U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

|                        |   |
|------------------------|---|
| Attorney Docket No.    | ICC-102.2 (81175)   |
| First Inventor         | Ashley J. Birkett   |
| Title                  | Immunogenic HBc Chimera Particles Having Enhanced Stability |
| Express Mail Label No. | EL617901606US   |

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO:

Assistant Commissioner for Patents  
Box Patent Application  
Washington, D.C. 20231

- ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original, and a duplicate for fee processing)
- ☐ Applicant claims small entity status.  
See 37 CFR 1.27.
- ☒ Specification [Total Pages 205]  
(preferred arrangement set forth below)  
- Descriptive title of the invention  
- Cross Reference to Related Applications  
- Statement Regarding Fed sponsored R & D  
- Reference to sequence listing, a table, or a computer program listing appendix  
- Background of the Invention  
- Brief Summary of the Invention  
- Brief Description of the Drawings (if filed)  
- Detailed Description  
- Claim(s)  
- Abstract of the Disclosure
- ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 10]
- Oath or Declaration [Total Pages]  
a. ☐ Newly executed (original or copy)  
b. ☐ Copy from a prior application (37 CFR 1.63(d))  
(for continuation/divisional with Box 18 completed)  
i. ☐ DELETION OF INVENTOR(S)  
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
- ☒ Application Data Sheet. See 37 CFR 1.76

- ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
- Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
  - ☒ Computer Readable Form (CRF)
  - Specification Sequence Listing on:
    - ☐ CD-ROM or CD-R (2 copies); or
    - ☒ paper
  - ☒ Statements verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

- ☐ Assignment Papers (cover sheet & document(s))
- ☐ 37 CFR 3.73(b) Statement of Attorney (when there is an assignee)
- ☐ English Translation Document (if applicable)
- ☐ Information Disclosure Statement (IDS)/PTO-1449
- ☐ Preliminary Amendment
- ☒ Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
- ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)
- ☐ Request and Certification under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
- ☒ Other: Unexecuted Declaration and Power of Attorney Certificate of Express Mail

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☒ Continuation-in-part (CIP) of prior application No. 60/225,843 and 60/226,867

Prior application information: Examiner None Group / Art Unit None  
For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 19. CORRESPONDENCE ADDRESS

☐ Customer Number or Bar Code Label or ☒ Correspondence address below  
(Insert Customer No. or Attach bar code label here)

|         |   |           |                |
|---------|---|-----------|----------------|
| Name    | Edward P. Gamson, Esq.                  |           |                |
|         | WELSH & KATZ, LTD.                      |           |                |
| Address | 120 South Riverside Plaza<br>22nd Floor |           |                |
| City    | Chicago                                 | State     | Illinois       |
| Country | Cook                                    | Telephone | (312) 655-1500 |
|         |   | Zip Code  | 60606          |
|         |   | Fax       | (312) 655-1501 |

|                   |                         |                                   |         |
|-------------------|-------------------------|-----------------------------------|---------|
| Name (Print/Type) | Edward P. Gamson, Esq.  | Registration No. (Attorney/Agent) | 29,381  |
| Signature         | <i>Edward P. Gamson</i> | Date                              | 8/15/01 |

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

**CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)**

Applicant(s): Ashley J. Birkett

Docket No.

ICC-102.2 (81175)

Serial No.  
UnknownFiling Date  
August 15, 2001Examiner  
UnknownGroup Art Unit  
UnknownInvention: **IMMUNOGENIC Hbc CHIMER PARTICLES HAVING ENHANCED STABILITY**I hereby certify that this **Transmittal Letter, Fee Sheet, Patent Application and it's stated enclosures***(Identify type of correspondence)*

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under  
37 CFR 1.10 in an envelope addressed to: The Commissioner of Patents and Trademarks, Washington, D.C.

20231-0001 on **August 15, 2001***(Date)***Anissa Johnson***(Typed or Printed Name of Person Mailing Correspondence)*  
*(Signature of Person Mailing Correspondence)***EL617901606US***("Express Mail" Mailing Label Number)***Note: Each paper must have its own certificate of mailing.**

# FEE TRANSMITTAL for FY 2001

*Patent fees are subject to annual revision.*

## Complete if Known

|                      |                   |
|----------------------|-------------------|
| Application Number   | Unknown           |
| Filing Date          | August 15, 2001   |
| First Named Inventor | Ashley J. Birkett |
| Examiner Name        | Unknown           |
| Group Art Unit       | Unknown           |
| Attorney Docket No.  | ICC-102.2 (81175) |

TOTAL AMOUNT OF PAYMENT **\$2,660.00**

### METHOD OF PAYMENT

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number **23-0920**

Deposit Account Name **Welsh & Katz, Ltd.**

☐ Charge Any Additional Fee Required Under 37 CFR §§ 1.16 and 1.17

☐ Applicant claims small entity status. See 37 CFR § 1.27

2. ☒ Payment Enclosed:

☒ Check ☐ Credit card ☐ Money Order ☐ Other

### FEE CALCULATION

#### 1. BASIC FILING FEE

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description        | Fee Paid |
|----------------------------|----------------------------|------------------------|----------|
| 101 710 201 355            |                            | Utility filing fee     | 710.00   |
| 106 320 206 180            |                            | Design filing fee      |          |
| 107 490 207 245            |                            | Plant filing fee       |          |
| 108 710 208 355            |                            | Reissue filing fee     |          |
| 114 150 214 75             |                            | Provisional filing fee |          |
| SUBTOTAL (1)               |                            |                        | 710.00   |

#### 2. EXTRA CLAIM FEES

| Total Claims       | Extra Claims | Fee from below | Fee Paid |
|--------------------|--------------|----------------|----------|
| 115                | -20** = 95   | X 18.00 =      | 1,710.00 |
| Independent Claims | 6 - 3** = 3  | X 80.00 =      | 240.00   |
| Multiple Dependent |              |                |          |

#### Large Entity Small Entity

| Fee Code (\$)   | Fee Code (\$) | Fee Description  |
|-----------------|---------------|--|
| 103 18 203 9    |               | Claims in excess of 20                                     |
| 102 80 202 40   |               | Independent claims in excess of 3                          |
| 104 270 204 135 |               | Multiple dependent claim, if not paid                      |
| 109 80 209 40   |               | ** Reissue independent claims over original patent         |
| 110 18 210 9    |               | ** Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2) **\$1,950.00**

\*\*or number previously paid, if greater; For Reissues, see above

### FEE CALCULATION (continued)

#### 3. ADDITIONAL FEES

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description  | Fee Paid |
|----------------------------|----------------------------|--|----------|
| 105 130 205 65             |                            | Surcharge - late filing fee or oath  |          |
| 127 60 227 25              |                            | Surcharge - late provisional filing fee or cover sheet                     |          |
| 139 130 139 130            |                            | Non - English specification  |          |
| 147 2,520 147 2,520        |                            | For filing a request for ex parte reexamination                            |          |
| 112 920* 112 920*          |                            | Requesting publication of SIR prior to Examiner action                     |          |
| 113 1,840* 113 1,840*      |                            | Requesting publication of SIR after Examiner action                        |          |
| 115 110 215 55             |                            | Extension for reply within first month                                     |          |
| 116 380 216 195            |                            | Extension for reply within second month                                    |          |
| 117 890 217 445            |                            | Extension for reply within third month                                     |          |
| 118 1,390 218 695          |                            | Extension for reply within fourth month                                    |          |
| 128 1,890 228 945          |                            | Extension for reply within fifth month                                     |          |
| 119 310 219 155            |                            | Notice of Appeal   |          |
| 120 310 220 155            |                            | Filing a brief in support of an appeal                                     |          |
| 121 270 221 135            |                            | Request for oral hearing   |          |
| 138 1,510 138 1,510        |                            | Petition to institute a public use proceeding                              |          |
| 140 110 240 55             |                            | Petition to revive - unavoidable   |          |
| 141 1,240 241 620          |                            | Petition to revive - unintentional   |          |
| 142 1,240 242 620          |                            | Utility issue fee (or reissue)   |          |
| 143 440 243 220            |                            | Design issue fee   |          |
| 144 600 244 300            |                            | Plant issue fee  |          |
| 122 130 122 130            |                            | Petitions to the Commissioner  |          |
| 123 50 123 50              |                            | Processing fee under 37 CFR § 1.17(e)                                      |          |
| 126 180 126 180            |                            | Submission of Information Disclosure Statement                             |          |
| 581 40 581 40              |                            | Recording each patent assignment per property (times number of properties) |          |
| 146 710 246 355            |                            | Filing a submission after final rejection (37 CFR § 1.129(a))              |          |
| 149 710 249 355            |                            | For each additional invention to be examined (37 CFR § 1.129(b))           |          |
| 179 710 279 355            |                            | Request for Continued Examination (RCE)                                    |          |
| 169 900 169 900            |                            | Request for expedited examination of a design application                  |          |
| Other fee (specify)        |                            |  |          |
| SUBTOTAL (3)               |                            |  |          |

\*Reduced by Basic Filing Fee Paid

### SUBMITTED BY

|                   |                        |                                   |         |                           |                |
|-------------------|------------------------|-----------------------------------|---------|---------------------------|----------------|
| Name (Print/Type) | Edward P. Gamson, Esq. | Registration No. (Attorney/Agent) | 29,381  | Telephone (if applicable) | (312) 655-1500 |
| Signature         |                        | Date                              | 8/15/01 |                           |                |

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on**

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

|                                       |   |                  |
|---------------------------------------|---|------------------|
| Applicant: Ashley J. Birkett          | ) |                  |
|                                       | ) | Attorney Docket: |
| Serial No.: Unknown                   | ) |                  |
|                                       | ) | ICC-102.2        |
| Filing Date: August 15, 2001          | ) | (4564/81175)     |
|                                       | ) |                  |
| For: IMMUNOGENIC HBc CHIMER PARTICLES | ) |                  |
| HAVING ENHANCED STABILITY             | ) | Group Art Unit:  |
|                                       | ) | Unknown          |
| Examiner: Unknown                     | ) |                  |

STATEMENT UNDER 37 CFR § 1.821(f)

Commissioner for Patents  
Box Patent Application  
Washington, D.C. 20231

Sir:

I hereby state that the enclosed computer readable form of the Sequence Listing (file: ICC-1022.app in ASCII format copied onto the accompanying diskette from PatentIn Ver. 2.0 on this date) and the paper copy of the Sequence Listing (pages 1 through 75) forming a part of the disclosure of the invention filed herewith on this day are identical.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false

New CIP Patent Application -2-  
Ashley J. Birkett

statements may jeopardize the validity of the application or  
any patent issued thereon.

Respectfully submitted,

By   
Edward P. Gamson, Reg. No. 29,381

Enclosures

Computer Readable Disk  
Patent Application and Fee  
Unexecuted Declaration and Power of Attorney  
Transmittal Letter  
Fee Sheet

WELSH & KATZ, LTD.  
120 South Riverside Plaza, 22nd Floor  
Chicago, Illinois 60606  
Phone (312) 655-1500  
Fax No. (312) 655-1501

CERTIFICATE OF EXPRESS MAILING

I hereby certify that this Statement, together with  
a Computer readable disk, Transmittal Letter and its stated  
enclosures and Patent Application and Fee, are being deposited  
with the United States Postal Service as Express Mail Label  
No. EL617901606US, postage prepaid, in an envelope addressed  
to: Assistant Commissioner for Patents, Box Patent  
Application, Washington, D.C. 20231 on August 15, 2001.

